



Patent Application

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We respectfully submit an application under Article 42 of Patent Act, file a Request for Examination under Article 59 of Patent Act, and request the present application to be published under Article 64 of Patent Act. Agent Seon(DaePyo)Patent Attorney ChoHongSoo, GwangGyeongCheol International Patent S. law firm (Signature)	
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Patent Specification

Abstract

Abstract

The invention relates to the method of automatically storing of the information of mobile communications terminal user using the mobile communications terminal, and comprises step of transmitting to the mobile communications terminal of requester the information of the step; subject that the databases of the information providing server in which step of requesting the information of the object in which the requester for to storing in the mobile communications terminal uses the mobile communications terminal and which wants to store information of mobile communications terminal user are saved the applicant information is to referred and certified and step of storing in the address memory of the mobile communications terminal the information of the subject. According to the invention, in case object permits the information opening request of requester, the information like the name, the telephone number, the date of birth, the e-mail address etc. of object can be stored anytime simply in the mobile communications terminal of requester when requester wants. Moreover, the information including the self introduction of object, photograph and moving picture etc. can be at looked. Moreover, it has the effect that the profit including the service charge etc. can be occurred as the for the subscriber joining into this service pays uses the mobile communications terminal.

Representative Drawing



Drawing 1

Index Term

The mobile communications terminal and the information auto save
Specification

Title of Invention

Method of automatically storing information of mobilecommunication terminal user(Method of automatically storing information of mobilecommunication terminal user)

Brief Description of the Drawings

Figure 1 is a block diagram which schematically shows the system offering the auto save service of the information of mobile communications terminal user using the mobile communications terminal according to the working example of the present invention.

Figure 2 is an example diagram showing the form displaying the information opening message of requester in the display of the mobile communications terminal of the subject.

Figure 3 is an example diagram showing the form displaying the information of requester in the display of the mobile communications terminal of the subject.

Figure 4 is an example diagram showing the form displaying the information of object in the display of the mobile communications terminal of requester.

Figure 5 is an example diagram showing the information automatic store menu added to the telephone book menu of the mobile communications terminal according to a preferred embodiment of the present invention.

The flowchart which schematically shows the automatic store operation of the information of mobile communications terminal user using the mobile communications terminal according to the working example of the fig. 6 after the invention.

Figure 7 is a flowchart in which requester specifically explains the operation of the step of requesting the information of object it uses of the fig. 6.

Figure 8 is a flowchart which specifically explains the step that the database of the information providing server is to be referred and certified of the fig. 8.

Figure 9 is a flowchart which specifically explains the operation of the step of storing in the address memory of the mobile communications terminal of requester the information of object of the fig. 6.

> Description of the symbol of the main part of the drawings.

11: requester 15: requester.

12, 14: USQ/BSQ(mobile switching center / base station controller)

13: information provider center 131: information providing server.

132: database 20: display.

21: huh is menu 22: object menu.

23: information illustration menu 24: store menu

25: additional information - illustration menu.

The Detailed Description of Invention

The Purpose of Invention

Field of Invention and the Prior Art

The invention relates to the method for automatically storing the information of the other mobile communications terminal user by using the mobile communications terminal.

Generally, the mobile communications terminal comprises the memory of storing the information of opponent, for example, the information including the telephone number of opponent, name etc. in order to offer the convenience of dialing. Since user in advance inputs it is processed auto-dialing of the information of the opponent saved in the memory can be processed the search of the telephone number. The storage of this opponent information is included through method it takes.

After user firstly uses the keypad (numeric key) of the mobile communications terminal and the first method inputs the telephone number, the function key demanding the storing telephone number is inputted. And then, the message demanding the input of the telephone number storage address and name is marked. And user accordingly inputs, inputted these dates are saved.

As the method which the second method uses the voice recognition, the message that it inputs the voice which it registers if the priority user inputs the speech recognition enrollment key is marked. Thereafter, the storage of the voice is included after the comparison with the signal of the voice inputted through the voice input of about 2 times initial. Thereafter, if the function key demanding the storing telephone number is inputted, it inputs whether user uses the keypad (the numeric key) of the mobile communications terminal and it makes the telephone number, and name and storing telephone number. Inputted these dates are saved.

In the described method as described above, the difference of somewhat, order can have but the storage of inputted data (the telephone number and name) is generally included of the method as described above.

But in the above case, as shown in it is explained, the inconvenience of its inputting a plenty of keys in order to store the information of opponent in the address memory of the mobile communications terminal and the problem that the time is required have. Moreover, in convention, it was saved as the information stored in the memory like the name of opponent, the telephone number, the e-mail address etc. only the basic information in the memory. In the information (for example, for example, the self introduction of opponent, photograph, the moving picture etc.) of the besides, the disadvantage of looking at had

Technical Problems to be solved by the Invention

Problem is solved. And the object of the invention is to provide the method for automatically storing additional information (looking at the self introduction, photograph and moving picture etc.) in the mobile communications terminal it connects with the basic information like the name, the telephone number, the date of birth, the e-mail address of opponent to the server in which the self introduction of opponent, photograph and moving picture etc. is saved the saving key is pressed the central Radio number of opponent is inputted to the mobile communications terminal.

The term 'information' used in this specification implies to include the basic information, and the URL information which connects to the server including the telephone number of the mobile communications terminal of opponent, date of birth, and the e-mail address and name. As to the URL information which connects to the server, the self introduction of opponent, and photograph and moving picture are saved by using the mobile communications terminal and looks at the self introduction, and photograph and moving picture additional information.



Moreover, the term 'requester' used in this specification implies the man storing the information of opponent in the address memory of its own mobile communications terminal. Moreover, 'object' implies the man in which requester requests the information opening, and 'requester' and 'object' everyone imply the man joining into the auto save service of the mobile communications user information using the mobile communications terminal in this specification.

The Structure and Function of the Invention (Device)

To accomplish the above objects, the invention relates to the method of automatically storing of the information of mobile communications terminal user using the mobile communications terminal, and the step of transmitting to the mobile communications terminal of requester the information of the step: subject that the database of the information providing server, and the step of storing in the address memory of the mobile communications terminal the information of the subject is included. As to step of, step of requesting the information of the object in which the requester for to storing in the mobile communications terminal uses the mobile communications terminal and which wants to store information of mobile communications terminal user are saved the opponent information is to referred and certified.

Moreover, requester as to method is the step of requesting the information of object it uses the mobile communications terminal comprises the step of requesting the information of the subject the mobile communications terminal of requester and if the step distinguish whether the information automatic store menu which automatically could store the information of the step of inputting requester is the telephone number of the subject in the mobile communications terminal, subject was selected or not is connected to the information providing server.

Moreover, the step that at the database of the information providing server in which the information of mobile communications terminal user is saved is to referred as to method and certified comprises the step of transmitting the step that the object receiving a message the step of transmitting the registration message to the step, information providing server distinguish in order not to disclose the information of the subject to the requester which is not permitted whether requester was registered in the blacklist of the subject or not is the mobile communications terminal of the subject registration message distinguish whether authentication was recognized or not and information providing server is the authentication authorization message to requester.

Moreover, the step of storing in the address memory of the mobile communications terminal the information of the subject as to method comprises the step of storing the information of the subject the mobile communications terminal of requester and if the step distinguish whether the step of displaying in the display of the mobile communications terminal the information of the subject transmitted from the information providing server, requester inputs the saving key of the mobile communications terminal or not.

Moreover, as to method, the step of displaying in the display of the mobile communications terminal of requester the self introduction of the subject and the step distinguish whether the additional information (illustration menu could look, it was selected or not, and photograph and moving picture is included more requester is saved in the information providing server.

Moreover, the information as to method comprises the basic information including the telephone number of the mobile communications terminal of the subject, the date of birth, and the e-mail address and name and additional information (which connect to the information providing server by using the mobile communications terminal and look at the self introduction of the subject saved in the information providing server, and photograph and moving picture.

Moreover, the step of inputting requester as to method, is the telephone number of the subject in the mobile communications terminal directly inputs the telephone number of the subject by using the ten key of the mobile communications terminal.

Moreover, if use the camera mounted on the mobile communications terminal of requester in the display of the mobile communications terminal of the subject and the step of inputting requester as to method, is the telephone number of the subject in the mobile communications terminal gets the video information of the basic information of the subject displayed in the display of the mobile communications terminal of the subject. The video information is deciphered and the telephone number of the subject is gotten from the video information and it inputs.

Moreover, as to method, requester name includes the step of transmitting the information providing server is the information opening reject message to requester in the step it was registered in the blacklist of the subject who did not permit the auto save to the mobile communications terminal, requester is registered in the blacklist of the subject.

Moreover, the step of confirming the subject as to method, is the information of requester is included more.

Moreover, as to method, the registration message the short message or the long message. The authentication authorization message the short message or the long message, and the information opening reject message furthermore the short message or the long message.

Herein after, referring to the figure, the working example of the present invention is explained specifically.

Figure 1 is a block diagram which schematically shows the system offering the auto save service of the information of mobile communications terminal user using the mobile communications terminal according to the working example of the present invention. Figure 2 is an example diagram showing the form displaying the information opening message of requester in the display of the mobile communications terminal of the subject. Figure 3 is the example diagram showing the form displaying the information of requester in the display of the mobile communications terminal of the subject. Figure 4 is an example diagram showing the form displaying the information of object in the display of the mobile communications terminal of requester.

In fig. 1, after the requester (11) inputs the telephone number of the object (15) by using the mobile communications terminal (it does not show), if the saving key of the mobile communications terminal is inputted, it connects through the HSC / BSC (12) to the information providing server (131) of the information provider center (13). Here, it is the moment in which requester directly inputs the telephone number of the object (15) as the method for writing telephone number of the object (15) by using the ten key (the numeric key) of the keypad of the mobile communications terminal (it does not show).

Moreover, the information (the reference : 40 the drawing 4) of the object (15) transmitted from the information providing server (131) is displayed through the display (20) of the mobile communications terminal of the requester (11). The requester (11) presses selection or the saving key (it does not show). In that way this information can be stored in the address memory of the mobile communications terminal and the additional information (illustration menu (the reference : 25 the drawing 4) is selected furthermore. In that way the information including the self introduction of the object (15), photograph, the moving picture etc. can be at looked through the display (20).

If in the information providing server (131), the requester (11) requests the information of the object (15), it refers to whether the database (132) of the information providing server (131) is to referred and the requester (11) is registered in the blacklist (in other words, the permanent information relates to public opening list of target people) of the object (15).

Moreover, if in the information providing server (131), the requester (11) is registered in the blacklist of the object (15), the information opening reject message is transmitted with the mobile communications terminal (not illustrated) of the requester (11). If the requester (11) is not registered in the blacklist of the object (15), the registration message saving the information open of the object (15) is transmitted with the mobile communications terminal (not illustrated) of the object (15).

Moreover, if it permits so that the object (15) disclose its own information to the requester (11), the information providing server (131) transmits the information of the object (15) with the mobile communications terminal (not illustrated) of the requester (11).

Furthermore, in the information providing server (131), the requester (11) or the object (15) connects to this server (131) by using the mobile communications terminal or the computer (it does not show). Its own information can be decorated. For example, it specifically can state about not only the letter but including the suggestion to the self-introduction area but also its own job, the paper etc. it announced photograph and moving picture etc. can be raised. It moreover wants to disclose. Furthermore, in the information providing server (131), the popular system is offered to the specific generation. The item of system is offered to charge and system is decorated.

The registration message to the object (15) is transmitted from the information providing server (131) through the HSC / BSC (12) to the mobile communications terminal (not illustrated) of the object (15).

If the registration message is a message received from the information providing server (131) to the mobile communications terminal of the object (15), message called 'the requester (11) requested you information opening' is as shown in Figure 2 displayed in the display (20) of the mobile communications terminal of the object (15).



After the object (1) confirms this message, in case of not permitting the information opening request of the requester (11) in case of permitting the information opening request of the requester (11) the reject menu (32) is selected. Moreover, the object (1) as shown in Figure 3 selects the information illustration menu (33). Whether the requester (11) is any kind of man or not can confirm. At this time, as the information which the information (33) of the displayed requester (11) is limited in the display (20), it is for example displayed only the basic information of the name, age, sex, the belongingness etc. of the requester (11) in the display (20) of the mobile communications terminal of the object (1).

In this way, the requester (11) uses the service which automatically stores the information of the object (1) in the mobile communications terminal of the requester (11). In that way the charge about the user information auto save service is charged from the mobile telecom company (not illustrated) to the requester (11). The requester (11) pays this service charge to the mobile telecom company. Moreover, the mobile telecom company and information provider center (1) distribute the service charge.

Figure 5 is an example diagram showing the information automatic store menu added to the telephone book menu of the mobile communications terminal according to a preferred embodiment of the present invention.

The mobile communications terminal the program in which the mobile communications terminal user finds the information auto save service, and executing this service include the information automatic store menu which it establishes. It automatically can store the information of opponent in the telephone book menu of the mobile communications terminal in the existing one of the telephone number search menu, the recent calling number menu, the recent received number menu, the received in a browse number menu, the method for registering telephone number menu etc. and as shown in Figure 5 can manage its own information.

If this information automatic store menu is selected, menu is displayed to be shown in Figure 5 decorate the information automatic store menu, and the information auto save setup menu and information.

As the menu which the information automatic store menu automatically stores the information of object, after this menu is selected, if requester inputs the telephone number of the subject to the mobile communications terminal and the saving key is pressed, the information of object is automatically saved in the mobile communications terminal of requester. It will be below more specifically explained about this.

As shown in menu is in the above case explained to records the information, the mobile communications terminal user uses the mobile communications terminal and it connects to the information providing server (Figure 1 reference : 131). The menu decorating its own information. Moreover, although not illustrated in the figure, the mobile communications terminal user uses computer and it connects to the information providing server (Figure 1 reference : 131) and its own information can be decorated.

The information auto save setup menu comprises the menu as follows.

1. the automatic full is menu: when in this menu, the opponent in other words, the requester (the reference : 11 the drawing 1), requests the information opening of oneself in other words, the object (the reference : 15 the drawing 1), the menu which always permits the information opening request of the requester (11).
2. the selection full is menu: if only in this menu, the requester (11) requests the information opening of the object (15), the menu which the object (15) permits the information opening request of the requester (11) or it refuses, selects.
3. automatic reject menu: when in this menu, the requester (11) requests the information opening of the object (15), the menu which always refuses the information opening request of the requester (11).

The flowchart which schematically shows the automatic store operation of the information of mobile communications terminal user using the mobile communications terminal according to the working example of the fig. 6 after the invention.

In the fig. 6, requester requests the information of object by using the mobile communications terminal (3100). It is specifically explained about two-step then fig. 7.

In case the information request of object has from requester, the object saved in the database (132) of the information providing server (131) is to referred in the information providing server (131). After distinguish whether requester was registered in the blacklist of object in order not to disclose the information of object to the requester which was not permitted, the registration message for recording the authorization of object before transmitting the information of object to requester is transmitted to the object (3200). It is specifically explained about two-step then fig. 8.

At step 3300, if the information providing server (131) receives a message the authentication authorization message permitting the release of information from the subject, the information of object is transmitted with the mobile communications terminal of requester.

The information of the object transmitted to the mobile communications terminal of requester is stored in the address memory of the mobile communications terminal (3400). It is specifically explained about two-step then fig. 9.

Figure 7 is a flowchart which specifically explains the operation of the step (3100) where requester requests the information of object by using the mobile communications terminal of the fig. 6.

In fig. 7, after requester inputs the telephone number of the subject to the mobile communications terminal, the saving key of the mobile communications terminal is inputted (3110) (3120).

At step 3130, whether the information automatic store menu in which requester automatically can store the information of object is selected or not distinguish. The information of object is stored according to the existing mode in the address memory of the mobile communications terminal in case of not selecting the information automatic store menu (3132).

At step 3130, if the information automatic store menu is selected, the mobile communications terminal of requester is at step 3131 connected to the information providing server and the information of object is requested.

Figure 8 is a flowchart which specifically explains the step (3200) in which the database of the information providing server is to referred and certified of the fig. 8.

In fig. 8, it firstly refers to the database (the reference : 132 the drawing 1) of the information opening server (131) and the information opening server (the reference : 131 the drawing 1) confirms whether requester was registered in the blacklist (in other words, the permanent information related to public opening list of target people) of object or not (3210).

At step 3210, in case requester is registered in the blacklist of object, the information opening server (131) transmits the information opening reject message with the mobile communications terminal of requester (3232).

At step 3210, in case requester is not registered in the blacklist of object, the information opening server (131) transmits the registration message with the mobile communications terminal of the object (3221).

The object receiving a message this registration message confirms message called 'requester requests the disclosure of your information' as shown in figures 2 and 3 displayed in the mobile communications terminal of the object in the display. In case moreover, object tries to look at the information of this requester, the information illustration menu is selected and the information of requester can be at looked (3231).

At step 3241, distinguish whether object selects permission menu (the reference : 21 the drawing 2 and fig. 3) or reject menu (the reference : 22 the drawing 2 and fig. 3) shown for the figure 2 and 3. In case object selects the reject menu (3), the information providing server (131) registers requester in the blacklist of object (3232). The information opening reject message is transmitted with the mobile communications terminal of requester (3232).

At step 3241, in case object selects permission menu (21), the information providing server (131) transmits the authentication authorization message with the mobile communications terminal of requester. The information of the object requesting is transmitted with the mobile communications terminal of requester (3251) (3200).

Figure 9 is a flowchart which specifically explains the operation of the step of storing in the address memory of the mobile communications terminal of requester the information of object of the fig. 8.



In fig. 8, if the information of the object transmitted from the information providing server (341) is a message received to the mobile communications terminal of requester (3410), the information of object stores in the address memory of the mobile communications terminal of requester (3420). This information is displayed in the display (3430).

At Step 3440, distinguish whether it does for the case of that requester looks at the self introduction of object, photograph, the moving picture etc., and the additional information : illustration menu (the reference : 25 the drawing 4) of the mobile communications terminal is selected. In case the additional information : illustration menu (25) is selected, the mobile communications terminal of requester is connected to the information providing server (341). Requester can look at the self introduction of object, photograph, the moving picture etc. through the display of the mobile communications terminal of requester (3430).

In the above preferred embodiment, it explained as the method in which requester directly inputted the telephone number of the subject as the method for writing telephone number of object by using the ten key numeric key of the keypad of the mobile communications terminal. However, it is not limited to that. For example, the camera mounted on requester is the mobile communications terminal of requester the basic information (for example, for example, the telephone number of object, name, the e-mail address etc.) of the object displayed in the display of the mobile communications terminal of the subject is faced in the display of the mobile communications terminal of the subject. The video information of the subject heart bone information is gotten, and the image of the video information is analyzed from 1 row 1 the heart pixel to the last row last column pixel. It projects as the histogram graph which is different at each number, appears the number of the analyzed image as described above. The complete histogram graph of the histogram graph, of the analyzed number as described above and number are compared. After the histogram graph of the analyzed number as described above and histogram graph of the complete number as described above which is most similar are found, the magnitude of the histogram graph of the analyzed number as described above is maximized. In that way image is edge corrected. Thereafter, the image edge corrected is analyzed from 1 row 1 the heart pixel to the last row last column pixel. The image edge corrected and the complete image are contrasted. The image edge corrected is deciphered. The method for the telephone number of the subject being gotten and automatically inputting possible.

Effect of Invention (Device)

As described above, according to the invention, in case object permits the information providing request of requester, the information like the name, telephone number, date of birth, the e-mail address etc. of object can be stored anytime simply in the mobile communications terminal of requester when requester wants. Moreover, the information including the self introduction of object, photograph and moving picture etc. can be at looked.

Furthermore, it has the effect that the profit including the service charge etc. can be occurred as the way the subscriber joining into this service pays use the mobile communications terminal.

In the above, it showed and the invention was explained for the specific preferred embodiment. But the invention is not limited to the above-described working example, and the invention does not escape the gist of the technical mapping of the invention in the patent claim having the normal knowledge in the technical field belonging of less than it grows and it variously differently will be able to implement.

Scope of Claim(s)

Claim [1]

As the method of automatically storing of the information of mobile communications terminal user using the mobile communications terminal.

The method for including the step of transmitting to the mobile communications terminal of requester the information of the step subject that the database of the information providing server, and the step of storing in the address memory of the mobile communications terminal the information of the subject. → to step 37, step of requesting the information of the object in which the requester for to storing in the mobile communications terminal uses the mobile communications terminal and which wants to store information of mobile communications terminal user are saved the opponent information is to referred and certified.

Claim [2]

The method for including the step of requesting the information of object it uses, requester the step of inputting requester is the telephone number of the subject in the mobile communications terminal the mobile communications terminal, and step of requesting the information of the subject the mobile communications terminal of requester and the step distinguish whether the information automatic store menu as to the first claim. Step of requesting the information of the subject the mobile communications terminal of requester and the step distinguish whether the information automatic store menu automatically could store was selected or not is connected to the information providing server the information of the subject.

Claim [3]

The method for including the step of transmitting the registration message to the step information providing server that the step that the database of the information providing server, and step of transmitting the step that the subject receiving a message distinguish whether authentication was recognized or not and information providing server is the authentication authorization message to requester the registration message. → to step 37, the information of mobile communications terminal user is saved is to referred as to the first claim, and certified distinguish whether requester was registered in the blacklist of the subject in order not to disclose the information of the subject to the requester which was not permitted or not in the mobile communications terminal of the subject.

Claim [4]

The method for including the step of storing in the address memory of the mobile communications terminal the information of the subject as to the first claim, in the step of displaying in the display of the mobile communications terminal the information of the subject transmitted from the information providing server, and requester is step 37 storing in the address memory of the mobile communications terminal the information of the subject and the step distinguish whether it inputs or not the saving key of the mobile communications terminal.

Claim [5]

The method for more including the step of displaying in the display of the mobile communications terminal of requester the self introduction of the subject and the step distinguish whether the additional information : illustration menu could look at was selected or not, and photograph and moving picture requester is saved as to claim 4 in the information providing server.

Claim [6]

The method for including basic information, and additional information : including the information, in the telephone number of the mobile communications terminal of the subject, date of birth, and the e-mail address and name among claim as to one claim. Additional information : connects to the information providing server, by using the mobile communications terminal and looks at the self introduction of the subject saved in the information providing server, and photograph and moving picture.

Claim [7]

The method which the step of inputting requester is the telephone number of the subject in the mobile communications terminal directly inputs the telephone number of the subject as to claim 2 by using the ten key of the mobile communications terminal.



⊗ Claim [8]

The method being the camera mounted on the mobile communications terminal of requester in the display of the mobile communications terminal of the subject and the step of inputting requester is the telephone number of the subject in the mobile communications terminal getting the video information of the basic information of the subject displayed in the display of the mobile communications terminal of the subject as to claim 2, and for the video information being deciphered and the telephone number of the subject being gotten from the video information and automatically inputting.

⊗ Claim [9]

The method in which requester more includes the step of transmitting the information providing server is the information opening reject message to requester in the step it was registered in the blacklist of the subject who did not permit the auto exec to the mobile communications terminal, requester is registered in the blacklist of the subject as to claim 2.

⊗ Claim [10]

The method for more including the step of confirming the subject is the information of requester as to claim 2.

⊗ Claim [11]

The registration message as to claim 2 the short message or the long message method.

⊗ Claim [12]

The authentication authorization message as to claim 2 the short message or the long message method.

⊗ Claim [13]

The information opening reject message as to claim 2 the short message or the long message method.

⊗ Drawing

⊗

FIG. 1







